

The background of the slide is a dark, abstract image featuring a series of bright, white light rays or beams that originate from the right side and fan out towards the left, creating a sense of motion and depth. The rays vary in intensity, with some appearing as sharp lines and others as softer, blurred streaks.

Go Fix It! Green Roads

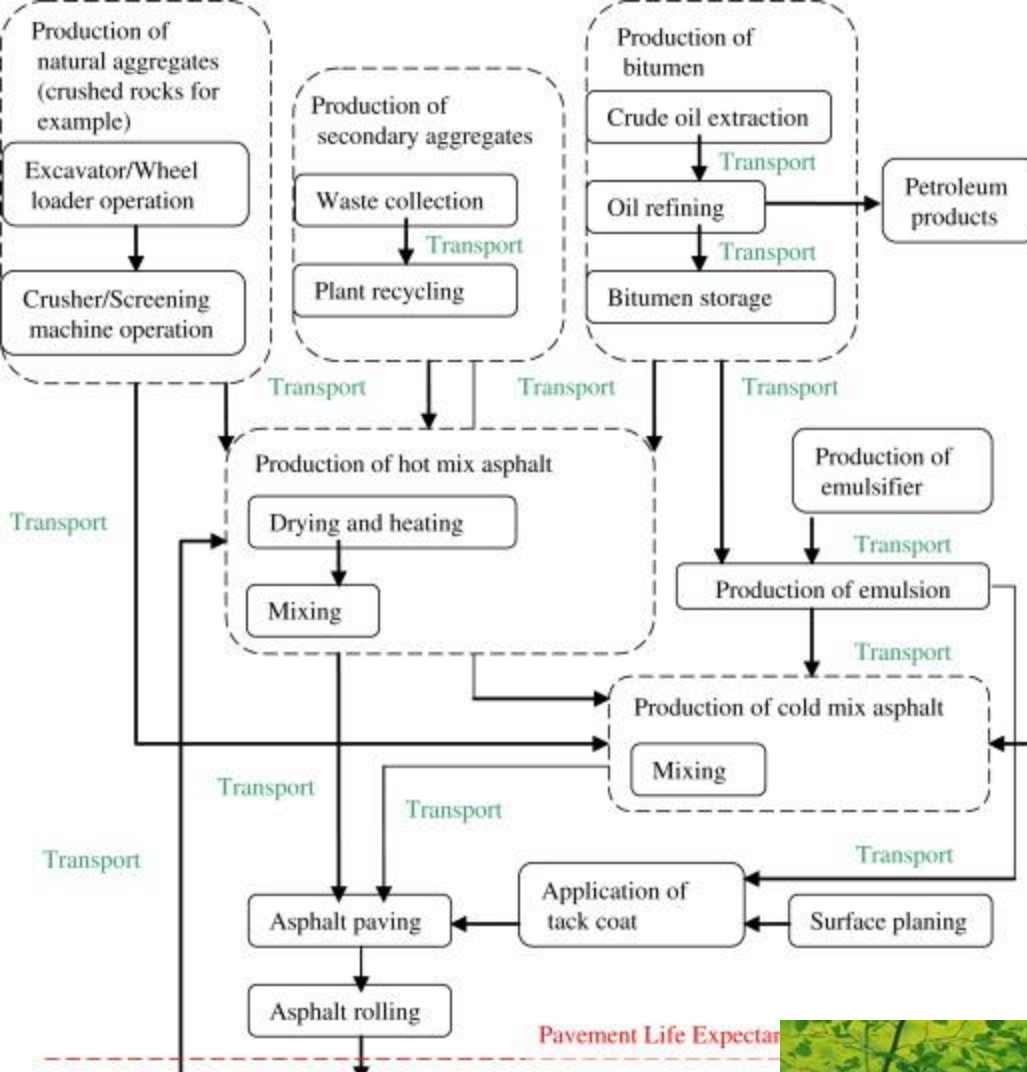
Thomas Hartmann

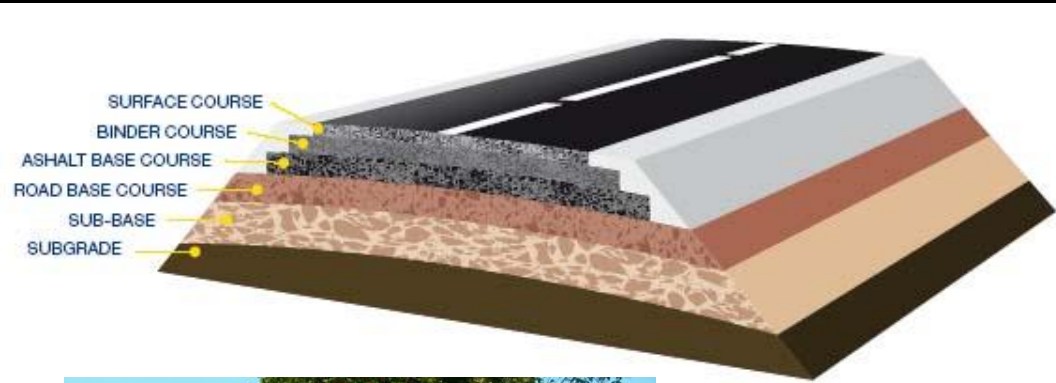
A Green Roads Standard

- Life Cycle Assessment (LCA)
- Road Planning
- Road Design
- Road Construction
- Road Operation



www.greenroads.us





TYPES OF POROUS PAVEMENT

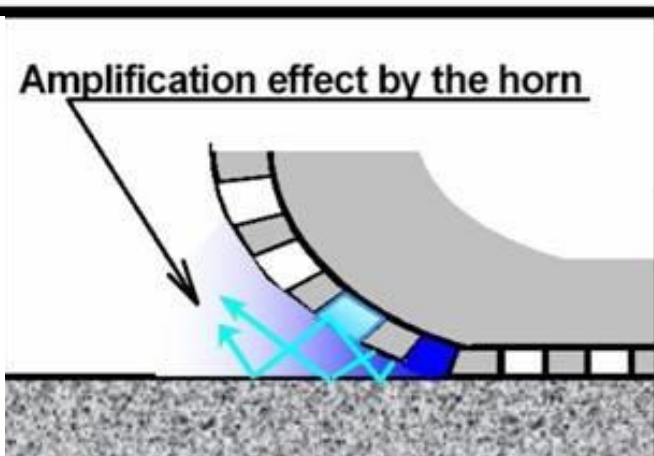
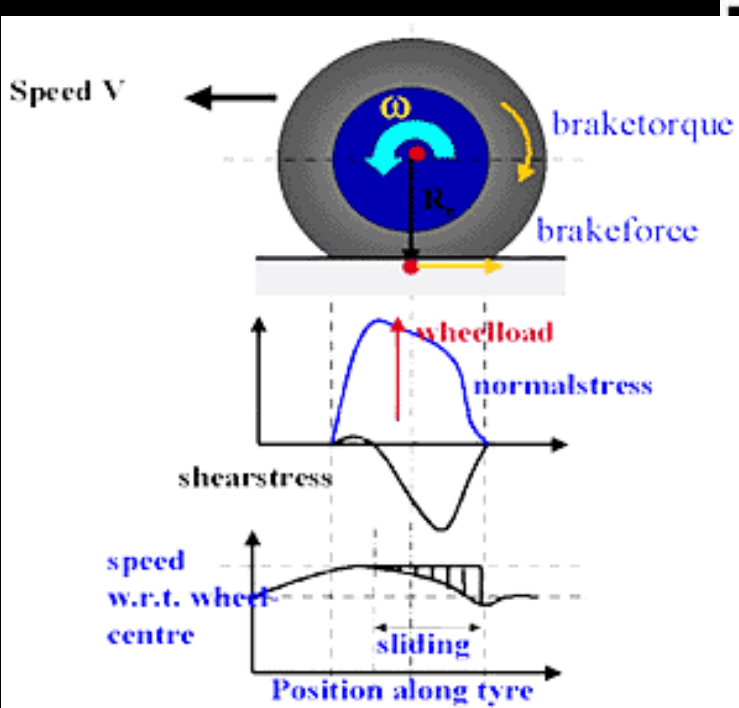
Porous Asphalt



Figure 2. Infiltration of 30 gallons per minute from a 2-inch hose at UNH.

Image courtesy University of New Hampshire Stormwater Center





Caption

Roads have many sustainability problems such as the energy used to create asphalt and the interference they have with the ecosystem around them. A green roads standard gives road planning and construction organizations a way of quantitatively rating sustainability and environmental friendliness of their roads.

First Slide

The first slide shows a diagram of the many steps involved in road planning, design, construction, and operation where greener practices could be used. For example, energy could be saved in the creation of asphalt by using Warm Mix Asphalt (WMA) instead of Hot Mix Asphalt (HMA). Images of steel slag and waste concrete and asphalt show some alternative materials that could be recycled into new asphalt. More efficient construction vehicles can also be used to reduce the fuel consumption and pollution produced from road construction. The image of the road to awareness shows that if awareness of this green roads standard by the public and road planning and construction companies is increased, the likelihood that the standards will be adopted is higher.

Caption

Second Slide

The second slide shows images of road construction, which is both resource intensive and reduces the fuel efficiency of vehicles attempting to travel through the construction area. More durable road designs that minimize maintenance would help to alleviate this problem. There is also an image of permeable pavement, which would help to reduce runoff and accidents caused by water on roadways.

Third Slide

The third slide shows multiple ways that roads can be modified to promote more environmentally friendly forms of transportation such as bicycling, walking, and car pooling. The top left of the slide shows a diagram of the traction between a tire and the road. Road surfaces with increased traction would help to reduce accidents, which are resource intensive, can physically damage the environment, and can release toxic chemicals into the environment. The center of the slide shows an image of a wildlife tunnel, which helps to reduce road kill.

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Image Links

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